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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,488	07/22/2002	Thomas Richard Kerby Edwards	71745/56925	4085
21874 7590 12/23/2008 EDWARDS ANGELL PALMER & DODGE LLP			EXAMINER	
P.O. BOX 55874			LUDLOW, JAN M	
BOSTON, MA 02205			ART UNIT	PAPER NUMBER
			1797	
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			12/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/049,488	EDWARDS ET AL.
Office Action Summary	Examiner	Art Unit
	Jan M. Ludlow	1797
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with t	the correspondence address
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by stany reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	COMMUNICATE OF THIS COMMUNICATE 1.136(a). In no event, however, may a reply riod will apply and will expire SIX (6) MONTHS atute, cause the application to become ABANI	TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 2 This action is FINAL . 2b) ☐ 1 Since this application is in condition for allo closed in accordance with the practice under	his action is non-final. wance except for formal matters	
Disposition of Claims		
4) ☐ Claim(s) 9-19 and 21 is/are pending in the above claim(s) is/are wither 4a) Of the above claim(s) is/are wither 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 9-19 and 21 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and Application Papers 9) ☐ The specification is objected to by the Example 21 is/are pending in the above claim(s)	drawn from consideration. d/or election requirement.	
10)☑ The drawing(s) filed on 8/21/2008 is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the cor 11)☐ The oath or declaration is objected to by the	the drawing(s) be held in abeyance. rection is required if the drawing(s) i	See 37 CFR 1.85(a). s objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a	ents have been received. ents have been received in Appl priority documents have been rec reau (PCT Rule 17.2(a)).	ication No ceived in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/M	mary (PTO-413) ail Date mal Patent Application

Application/Control Number: 10/049,488 Page 2

Art Unit: 1797

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 9-19, 21 are rejected under 35 U.S.C. 103(a) as being obvious over Hughes 3,882,665.

Page 3

Hughes teaches coating wire with plastic in an extrusion method, including a step of cooling the wire during the coating process (col. 7, lines 63-67). The wires are joined together in a strip 23 with apertures (sprockets) 24 (Figure 3). With respect to claim 22, plural plungers 19 on different axes inside different regions of second molded material 21 having a common core where walls 21 abut are adjacent to apertures 24. Note that in Figure 2, the wires 19 are shown protruding beyond the coatings 21. There are at least two reasons for coating the wires: a) to facilitate movement and adjustment of the wires (col. 1, lines 32-35) and b) to prevent corrosion by making the plastic very adherent to the wire (col. 2, lines 18-24). A primer is used to adhere the plastic tightly (col. 7, line 66- col. 8, line 5).

Hughes fails to teach that the wire (instant plunger) can slide in the coating (instant barrel).

It would have been obvious to omit the primer for adhering the plastic tightly to the wire if one were willing to forego the corrosion resistance of tight adherence of the plastic to the wire, for example, if one were drilling in a non-corrosive environment.

See, e.g., MPEP 2144.04 IIA, reproduced below:

A. Omission of an Element and Its Function Is Obvious if the Function of the Element Is Not Desired

Ex parte Wu , 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989) (Claims at issue were directed to a method for inhibiting corrosion on metal surfaces using a composition consisting of epoxy resin, petroleum sulfonate, and hydrocarbon diluent. The claims were rejected over a primary reference which disclosed an anticorrosion composition of epoxy resin, hydrocarbon diluent, and polybasic acid salts wherein said salts were taught to be beneficial when employed in a freshwater environment, in view of secondary references which clearly suggested the addition of petroleum sulfonate to corrosion inhibiting compositions. The Board affirmed the rejection, holding that it would have been obvious to omit the

Application/Control Number: 10/049,488

Art Unit: 1797

polybasic acid salts of the primary reference where the function attributed to such salt is not desired or required, such as in compositions for providing corrosion resistance in environments which do not encounter fresh water.). See also In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965) (Omission of additional framework and axle which served to increase the cargo carrying capacity of prior art mobile fluid carrying unit would have been obvious if this feature was not desired.); and In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (deleting a prior art switch member and thereby eliminating its function was an obvious expedient).

Page 4

It is the examiner's position that omission of the primer would result in a poorly adhered coating that would be moveable relative to the wire, thus satisfying the limitations of both the method and apparatus claims. While Hughes does not use the device as a plunger type pipette, it is structurally capable of such use (when the invention of Hughes is modified as described), e.g., by moving the central or other wires. There is no claim directed to the method of use.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kopito additionally teaches a positive displacement sampler.

Amis additionally teaches coating a wire with plastic including cooling the wire (col. 2, lines 23, 50-54).

- 6. Applicant's arguments filed August 21, 2008 have been fully considered but are not found persuasive
- 7. Applicant argues that "the inventive step in '488 is... *to use* [emphasis added] the two components—the polymeric layer and the metallic core—as barrel and piston of a dispensing or aspirating device". Unfortunately, this is not the case. There is *no step*

Application/Control Number: 10/049,488

Art Unit: 1797

in any of the instant claims directed *to using* the components claimed as an aspirator or dispenser. The instant claims merely require that the core be structurally capable of sliding relative to the outer layer such that they are structurally capable of such use. Why is it, if applicant believes this to be the inventive step, that applicant has not claimed a step of aspirating or dispensing?

Page 5

8. Applicant argues that "the essential test of obviousness would appear to hinge on whether it is apparent that by using a means of protecting a flexible or rigid wire with a polymeric coating and then introducing relative motion between the two components, a positive displacement pipette device can be realized." Again, there is no method step directed to providing relative motion between the components. Applicant apparently is placing far too much weight on the preamble of the claims. In response to applicant's arguments, the recitation "plunger type pipette" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). In this case, the prior art makes obvious the method and structure claimed, and simply *calling* the resultant method a "method of making a plunger type pipette" or the resultant device a "plunger type pipette" does not define over the obvious method steps or structure.

Application/Control Number: 10/049,488

Art Unit: 1797

9. The declaration under 37 CFR 1.132 filed August 21, 2008 is insufficient to overcome the rejection of claims above based upon Hughes as set forth in the last Office action because: The declaration offers mere opinion without supporting evidence. Further, the opinion is not germane to the actual claim language. In particular, in item 7, the declarant states that Hughes fails to teach a dispensing/aspirating device either by direct reference or by implication. As explained above, this is not the issue. The issue is whether or not Hughes teaches or suggests a method of making and device as claimed, most simply, a wire coated in polymer where the wire could slide in the polymer. The declarant does not believe that it is possible for the coating to move longitudinally with respect to the inner filament, but the claims recite moving the inner filament in the coating, and it is the examiner's position that if the bonding compound were eliminated, it would be possible to pull on an inner wire with sufficient force to slide it relative to the coating. The declarant is of the opinion that it would be "impractical" to move the wire and it would not be obvious such movement could be achieved, but the examiner sees no reason why, with sufficient force, a wire couldn't be moved. With respect to the spiral structure, the instant claims do not require a linear structure. The examiner's position is relative to a single core within a single jacket, not the outer jacket, and the interstices between the individual jackets are outside of the individual jacket (instant barrel) not within. With respect to item 8, individual use implied in the disclosure is not the same as direct language in the claims. With respect to item 9, the intended use of the sprockets is not given patentable weight. With respect to item 10, the examiner relied upon the second reason for coating (to

Page 6

Application/Control Number: 10/049,488 Page 7

Art Unit: 1797

prevent corrosion) as motivation, and therefore the reference to facilitating movement and adjustment is not germane to the rejection. With respect to item 11, in that no relative emotion is actually claimed, it does not matter whether it would have be obvious or necessary to move the wires in Hughes. The examiner has provided motivation to eliminate the bonding agent--in applications where corrosion is not an issue--and the structural capability of movement inherently follows.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday, Tuesday and Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jan M. Ludlow Primary Examiner Art Unit 1797

/Jan M. Ludlow/

Primary Examiner, Art Unit 1797